

WO 99/25673

PCT/EP98/07148

Unsaturated palm oil fatty alcohols

This application is a continuation of 09/554,651, filed 07/26/2000, now abandoned, which is a 371 of PCT/EP98/07148, filed 11/09/1998.

Field of the invention

The invention relates to unsaturated fatty alcohols which are obtained by fractionating palm oil fatty acid methyl esters, and then hydrogenating the fraction of unsaturated long-chain methyl esters, and to a process for the preparation of these fatty alcohols.

a10

Prior art

Statement of Related Art

Unsaturated fatty alcohols are important intermediates for a large number of products of the chemical industry, such as, for example, for the preparation of surfactants and skincare products. A review on this topic can be found, for example, by U. Ploog et al. in Seifen-Öle-Fette-Wachse [Soaps-Oils-Fats-Waxes] 109, 225 (1983). They are prepared from more or less unsaturated fatty acid methyl esters which can be hydrogenated, for example, in the presence of chromium- or zinc-containing mixed catalysts [Ullmann's Encyclopedia of Industrial Chemistry, Verlag Chemie, Weinheim, 4th Edition, Vol. 11, p. 436 ff]. The prior art is a large-scale process, as has hitherto also been carried out by the applicant, according to which animal fats and oils are used, and the unsaturated fatty alcohols produced after the hydrogenation are distilled at a still temperature of e.g. 220 to 250°C and a reduced pressure of from 1 to 20 mbar - measured at the top of the column. Since the preparation of unsaturated fatty alcohols is associated with high costs, distillation has been carried out with as low a raw material loss as possible. In fact, in this way, it was possible to achieve a yield of about 90% of theory, and correspondingly a loss of 10%, although the products exhibited a marked intrinsic odor. A further disadvantage is that the fatty alcohols of the prior art have unsatisfactory storage and low-temperature behavior.